**Logical Fallacies**

1. **Ad Hominem** occurs when someone attacks another person’s point of view by criticizing that person, not the issue. Often called ‘mudslinging’ ad hominem arguments try to invalidate a person’s ideas by revealing unrelated, past or present, personal or ethical flaws. While this technique can appear very obvious, be careful. The speaker can align the subject to a negative group or refer to a negative aspect of this person’s past.

*Example: Margo Slate cannot serve as governor because she has close to zero sense of humor.*

The mention of Slate’s sense of humor is a personal attack and not relevant to the role of a governor.

1. **Begging the Question** is when the writer assumes the truth of something that is yet to be proven.

*Example: Because teens are dangerous, car insurance companies should limit coverage to person’s over 18.*

In this example, the fact that teens are dangerous is not proven but the author assumes that reader will accept the view and pay more attention to the later part of the sentence.

1. **Either-or Fallacies** occur when the author tries to insist that the situation can only be resolved in one of two possible ways. Here, the writer tends to bully the audience into a corner when really, there are many other options available.

Example: You are either with us or against us.

Ignoring the possibility of other options is a technique this author is using to force audiences into a decision that they may not feel entirely comfortable with but feel there is no other option.

1. **Hasty Generalizations** are unsound conclusions based on too few instances of behavior or example. In order to create a true cause and effect reasoning statement, one would certainly need a much larger number of examples and each example would need to be thoroughly tested. Look for keyword giveaways like ‘all’, ‘none’, and ‘never’. In general, no generalizations ever prove true.

*Example: I’m allergic to curry because I got sick once after eating at an Indian restaurant.*

There are several other possible explanations that could explain the illness and to draw this conclusion would require repetitions of this experience or lab testing to truly identify if the author has food borne allergies directly connected to the curry spice.

1. **Red Herring** arguments are deliberate attempts to redirect the audience’s attention to something entirely unrelated to the core issue. Rather than examine the merits of the issue, the author tries to draw attention to a peripheral and often unrelated topic. You could call this fallacy the classic ‘change the topic’ technique. The interesting part of recognizing this logical fallacy is not whether the speaker has changed the topic, but rather, you should be asking why the speaker is avoiding the subject.

*Example: If someone tells you that Burger King has failed a number of health codes, a red herring response from the manager would be, “This wouldn’t have happened if the state didn’t arrest all of our employees the day before.”*

The manager’s response tries to distract the audience from his responsibility in the situation by discussing the arrest of his employees which might have inconvenienced him, but is not the reason for the health code violation.

1. **Post Hoc** thinking results when it’s presumed that one event caused another just because it occurred first. This illogical reasoning uses what could be considered a coincidence to explain a cause an effect relationship resulting in false generalizations and superstitions. There are far too many variable to consider and just because the two events may have happened at similar times, doesn’t mean that they are consequential.

Example: If your car broke down the day after you lent it to your brother, you would be committing post hoc fallacy if you blamed your brother. Unless you know he did something directly to cause the engine problem, the fact is that the two events are inconsequential. Otherwise, there are many other reasons why the car broke down when it did.

1. **False Analogy** fallacies will try to suggest that because two things are alike in some ways, they are alike in all ways. The author will hope that the very significant differences between the two will be overlooked.

Example:

*The universe is like an intricate watch.*

*A watch must have been designed by a watchmaker.*

*Therefore, the universe must have been designed by some kind of creator.*

While the universe may be like a watch in that it is intricate, this does not in itself justify the assumption that watches and the universe have similar origins nor does it prove the existence of a creator.

1. **Questionable Authority** fallacies are very popularly abused in advertising. These fallacies are revealed by such phrases as “studies show”, “experts claim”, and “surveys prove”. Readers have the right to be suspicious of the writer’s credibility when the authority behind the statements is never fully developed.

*Example: The students surveyed all agree that the school day should begin later in the morning.*

Critical readers should question which students were surveyed, what questions were involved in the survey, where and when the survey took place, and most importantly, whether students who may have bias towards the school starting time really are credible sources for this statement.

1. **Slippery Slope** fallacies are illogical jumps to conclusions based on one event. There may be many steps between one event to the next but the writer is leaping over the steps and hoping that the audience will join him. Slippery slope fallacies are largely based on fear or shock effect. Beneath the umbrella of slippery slope, you will often find appeals to fear

*Example: If we don’t stop the tuition increase now, nobody will be able to afford college in the future*.

Assuming that ‘nobody’ will afford college is not logical and there are many stages before someone could draw such a drastic conclusion.

1. **Appeal to Tradition / Antiquity:** Appeal to Tradition is a fallacy that occurs when it is assumed that something is better or correct simply because it is older, traditional, or "always has been done." This sort of "reasoning" is fallacious because the age of something does not automatically make it correct or better than something newer.

*Example: The theory that witches and demons cause disease is far older than the theory that microrganisms cause diseases. Therefore, the theory about witches and demons must be true.*

This sort of "reasoning" is appealing for a variety of reasons. First, people often prefer to stick with what is older or traditional. This is a fairly common psychological characteristic of people which may stem from the fact that people feel more comfortable about what has been around longer. Second, sticking with things that are older or traditional is often easier than testing new things. Hence, people often prefer older and traditional things out of laziness. Hence, Appeal to Tradition is a somewhat common fallacy.Example: Throughout time, most physicians in our country have been male. Women’s disinterest in joining the medical profession is an area that demands our immediate attention.

The conclusion fails to consider that many factors contributed to the dominance of males in the medical field including stereotypes, female access to education, and social norms.